CLAIM 1

The Examiner's attention is directed to the following limitations of independent claim 1 (emphasis added):

> An apparatus for use in a bufferless network comprising:
> [...]
> - a traffic detection unit coupled to said first and second inputs, **said traffic detection unit operative to monitor the traffic units received at said first and second inputs for detecting said first and second traffic patterns;**
> - a notification unit for generating a control signal for transmission to either one of the first and second source points **on a basis of the first and second traffic patterns detected by said traffic detection unit**, said control signal being directive to regulate at least in part the traffic pattern of the traffic units sent from either one of the first and second source points **such that a possibility of collision between the traffic units sent from the first source point and the traffic units sent from the second source point is reduced.**

Newman et al. does not disclose, teach nor suggest the above-emphasized limitations of claim 1. More specifically, Newman et al. does not disclose a "traffic detection unit operative to monitor the traffic units received at [the] first and second inputs for detecting [the] first and second traffic patterns", nor a "notification unit for generating a control signal (...) on a basis of the first and second traffic patterns (...) to regulate at least in part the traffic pattern of the traffic units (...) such that a possibility of collision between the traffic units (...) is reduced".

There is neither mention nor discussion in Newman et al. of the concept of detecting the traffic patterns of traffic units received from first and second source points, nor of regulating these traffic patterns such that a possibility of collision between the traffic units sent from the first source point and the traffic units sent from the second source point is reduced.

Rather, as discussed at column 3, lines 36-48, column 5, lines 25-33, column 7, line 53 to column 8, line 2 and column 9, lines 48-60, Newman et al. are concerned with detecting traffic congestion at a node by monitoring queue fullness and, once congestion

has been detected, with taking corrective action to reduce the detected congestion by sending a congestion signal from the location where the congestion was detected back to the source. Thus, in contrast to preemptively reducing a possibility of collisions at a node by monitoring and regulating incoming traffic patterns, as claimed in claim 1, Newman et al. teach *reactively* controlling congestion once this congestion has already occurred and been detected at a node.

In light of the foregoing, the Applicant respectfully submits that Newman et al. does not teach nor suggest the invention claimed in claim 1. Accordingly, the subject matter of claim 1 is believed to be novel and inventive over Newman et al. and, as such, in condition for allowance. The Examiner is requested to withdraw the rejection of claim 1 under 35 U.S.C. §102(b).

CLAIMS 2-18

Claims 2-18 depend from claim 1 and therefore include all the limitations of independent claim 1. As such, claims 2-18 are also believed to be in allowable form.

CLAIM 19

The Examiner's attention is directed to the following limitations of claim 19 (emphasis added):

> A method for **preventing collisions** between traffic units sent from a first source point and traffic units sent from a second source point at a transmission node in a bufferless network, the traffic units from **the first source point being characterized by a first traffic pattern, the traffic units from the second source point being characterized by a second traffic pattern**, said method comprising:
>
> [...]
>
> - generating a control signal for transmission to either one of the first and second source points **on a basis of the detected first and second traffic patterns**, said control signal being directive to regulate at least in part the traffic pattern of the traffic units sent from either one of the first and second source points **such that a possibility of collision between the traffic units sent from the first source point and the traffic units sent from the second source point is reduced.**

For the same reasons discussed above with respect to claim 1, the Applicant respectfully submits that claim 19 is neither anticipated nor rendered obvious by the Newman et al. and, as such, is in condition for allowance. The Examiner is requested to withdraw the rejection of claim 19 under 35 U.S.C. §102(b).

CLAIMS 20-31

Claims 20-31 depend from claim 19 and therefore include all the limitations of independent claim 19. As such, claims 20-31 are also believed to be in allowable form.

CLAIM 32

The Examiner's attention is directed towards the following limitations of independent claim 32 (emphasis added):

> A bufferless network formed of a plurality of transmission nodes, each one of said plurality of transmission nodes comprising:
>
> [...]
>
> - a traffic detection unit coupled to said first and second inputs, **said traffic detection unit operative to monitor the traffic units received at said first and second inputs for detecting said first and second traffic patterns;**
> - a notification unit for generating a control signal for transmission to either one of the first and second source points **on a basis of the first and second traffic patterns detected by said traffic detection unit**, said control signal being directive to regulate at least in part the traffic pattern of the traffic units sent from either one of the first and second source points **such that a possibility of collision at the transmission node between the traffic units sent from the first source point and the traffic units sent from the second source point is reduced.**

For the same reasons discussed above with respect to claim 1, the Applicant respectfully submits that claim 32 is neither anticipated nor rendered obvious by the Newman et al. and, as such, is in condition for allowance. The Examiner is requested to withdraw the rejection of claim 32 under 35 U.S.C. §102(b).

CLAIM 33-36

Claims 33-36 depend from claim 32 and therefore include all the limitations of independent claim 32. As such, claims 33-36 are also believed to be in allowable form.

CLAIM 37

The Examiner's attention is directed towards the following limitations of independent claim 37 (emphasis added):

> A computer readable storage medium containing a program element for execution by a computing apparatus to implement a device [...] said device including:
>
> - **a traffic detection unit operative to monitor the traffic units sent from the first and second source points for detecting the first and second traffic patterns;**
> - a notification unit for generating a control signal for transmission to either one of the first and second source points **on a basis of the first and second traffic patterns detected by said traffic detection unit**, said control signal being directive to regulate at least in part the traffic pattern of the traffic units sent from either one of the first and second source points **such that a possibility of collision between the traffic units sent from the first source point and the traffic units sent from the second source point is reduced.**

For the same reasons discussed above with respect to claim 1, the Applicant respectfully submits that claim 37 is neither anticipated nor rendered obvious by the Newman et al. and, as such, is in condition for allowance. The Examiner is requested to withdraw the rejection of claim 37 under 35 U.S.C. §102(b).

CLAIM 38-52

Claims 38-52 depend from claim 37 and therefore include all the limitations of independent claim 37. As such, claims 38-52 are also believed to be in allowable form.

CLAIM 53

The Examiner's attention is directed towards the following limitations of independent claim 53 (emphasis added):

> An apparatus for use in a bufferless network comprising:
> [...]
> - traffic detection means coupled to said first and second input means, **said traffic detection means operative to monitor the traffic units received at said first and second input means for detecting said first and second traffic patterns;**
> - notification means for generating a control signal for transmission to either one of the first and second source points **on a basis of the first and second traffic patterns detected by said traffic detection means**, said control signal being directive to regulate at least in part the traffic pattern of the traffic units sent from either one of the first and second source points **such that a possibility of collision between the traffic units sent from the first source point and the traffic units sent from the second source point is reduced**.

For the same reasons discussed above with respect to claim 1, the Applicant respectfully submits that claim 53 is neither anticipated nor rendered obvious by the Newman et al. and, as such, is in condition for allowance. The Examiner is requested to withdraw the rejection of claim 53 under 35 U.S.C. §102(b).

C. Rejections under 35 U.S.C. §103

In the Office Action, the Examiner has rejected claims 2, 20 and 38 under 35 U.S.C. §103(a) as being obvious over Newman et al. in view of U.S. Patent No. 5,459,719 (hereinafter referred to as Hayashi).

The Examiner has also rejected claims 3-10, 21-25 and 39-44 under 35 U.S.C. §103(a) as being obvious over Newman et al. in view of Hayashi and further in view of U.S. Patent No. 5,683,359 (hereinafter referred to as Peltola et al.).

Furthermore, the Examiner has rejected claims 11-13, 26-28 and 45-47 under 35 U.S.C. §103(a) as being obvious over Newman et al. in view of Hayashi and Peltola et al.